

DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182

[denr.sd.gov](http://denr.sd.gov)

May 25, 2016

Ernst Temperli  
Crosswind Jerseys, Inc.  
21672 482<sup>nd</sup> Avenue  
Elkton, SD 57026-7223

RE: Crosswind Jerseys, Inc. Manure Management System  
As-Built Plans Review

Dear Mr. Temperli:

The Department of Environment and Natural Resources received four copies of the as-built plans for the expansion to your existing manure management system approved by the department on March 19, 2015, and the permeability test results for the completed clay liner beneath the floor of the west half of the south freestall barn on May 11, 2016. The manure management system is located in the Southeast  $\frac{1}{4}$  of Section 15, Township 109 North, Range 48 West in Brookings County, South Dakota.

Your permitted manure management system is for a housed lot feeding a maximum of 1,400-head of dairy cattle consisting of 1,300-head of mature dairy cattle and 100 calves. Your system consists of a scraper/flume system in each of the three barns (the west half of the south barn has not been permitted), piping, a milk parlor, a calf hut area, diversion dikes or channels, a concrete sand settling lane, a concrete sand stacking pad, two settling ponds, two holding ponds, a feed storage area, a clay-lined manure stacking pad, a clay-lined sand stacking pad, and 1.85 acres of drainage area. The settling ponds and the holding ponds have at least 365 days of liquid storage capacity.

The department has also approved plans which include enlarging and moving the existing clay-lined sand storage pad to the east, pouring concrete for the pad, and removing the existing clay-lined manure stacking pad which will increase the total drainage area to 2.97 acres, changing the maximum animal numbers to 2,300-head of mature dairy cattle and 50 calves, and constructing a fourth freestall barn.

We approved revised plans and specifications for your project on March 19, 2015. The current as-built changes consist of the following:

- The length of the west half of the south freestall barn was increased from 288 feet to 290 feet;
- The 6-inch PVC piping for the floor drains in the vet area along the north side of the east half of the south freestall barn were shown on the plans;

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- The calf hutch area was shown on the plans; and
- A signed, revised operation and maintenance guideline that indicates the feed storage area will remain covered was submitted.

We have reviewed and hereby conditionally approve the changes shown on the as-built plans and accept the permeability test results as meeting the requirements of the general permit. Two copies of the as-built plans are being kept for our files. Please replace the appropriate pages in your plans and specifications booklet with the revised pages enclosed with this letter and add any additional pages enclosed with this letter into your plans and specifications booklet. Please see the following requirements.

#### **Feed Storage Area**

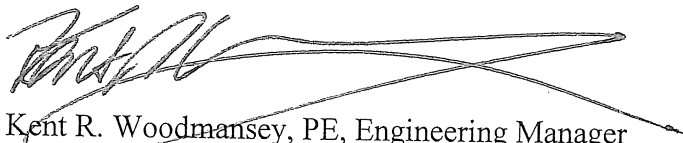
Your engineer must still submit a cross section of the expanded concrete feed storage pad as stated in the department's January 28, 2016, as-built approval letter.

#### **Recycle Wet Well**

Your engineer indicates the proposed 12-inch PVC piping between holding pond 2 and the existing wet well will be installed in the future. Your engineer must submit a revised detail of the recycle wet well showing how the pipe is connected to the recycle wet well. If the pipe penetrates the side of the wet well, your engineer must indicate how the pipe penetration is sealed.

If you have any questions regarding the content of this letter, please feel free to contact Ben Myers, Feedlot Permit Program at (605) 773-3351. Thank you for your cooperation.

Sincerely,



Kent R. Woodmansey, PE, Engineering Manager  
Feedlot Permit Program

cc: Brian Friedrichsen, PE, Dakota Environmental Inc, Huron, SD  
Brookings County Commissioners  
Luke Muller, F.D.A.L.G., Watertown, SD